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Zeichen/Ref./Réf. <b>2645EPOW</b>	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n° <b>00956925.2-2103/JP0006012</b>
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire <b>Takeda Chemical Industries, Ltd.</b>	

## COMMUNICATION

The European Patent Office herewith transmits the <sup>supplementary</sup> partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

The applicant's attention is drawn to the following:

The search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within ONE MONTH after notification of this communication.

If the application has been filed up to 30 June 1999, the search fee in force before 01 July 1999 (EUR 869,-) or the equivalent applicable on the date of payment is payable.

**This applies also to the search fees requested under Rule 46(1) EPC.**

See also OJ EPO 06/1999, 405.

Moreover, the Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims; reference is made to sheet C, which is attached to the search report.

☐ The abstract was modified by the Search Division and the definitive text is attached to the present communication.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) attached as well.

### Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement to OJ EPO 02/1999.

REGISTERED LETTER



EP 00 95 6925

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	<div> <div>Relevant to claim</div> <div>CLASSIFICATION OF THE APPLICATION (Int.Cl.7)</div> </div>
X	GUPTA, R.N. ET AL.: CAN. J. CHEM., vol. 49, 1971, pages 384-397, XP001040672	<div>1, 3-6, 8, 10-12, 14-16, 18-20, 7</div> <div>C07C229/18 C07C227/14 C07D223/16</div>
Y	* page 396 *	
Y	REPPE, WALTER ET AL.: LIEBIGS ANNALEN DER CHEMIE, vol. 596, 1955, page 1 XP002226076 * page 217 *	<div>7</div> <div></div>
X	BLACKBURN, S.: BIOCHEM. J., vol. 45, 1949, pages 579-584, XP001040675 * page 580 *	<div>1, 3-5, 8, 10-12, 14, 15</div> <div></div>
		<div>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</div> <div>C07C</div>
<div>LACK OF UNITY OF INVENTION</div> <div> <p>The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:</p> <p>see sheet B</p> <p>The present partial European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.</p> </div>		
<div>Place of search</div> <div>BERLIN</div>		<div>Date of completion of the search</div> <div>23 December 2002</div>
		<div>Examiner</div> <div>Krische, D</div>
<div>CATEGORY OF CITED DOCUMENTS</div> <div> <div> X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document </div> <div> T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document </div> </div>		



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	BRAUNHOLTZ J T ET AL: "THE STRUCTURE AND PROPERTIES OF CERTAIN POLYCYCLIC INDOLO- AND QUINOLINO-DERIVATIVES. PART XI. DERIVATIVES OF 4:5:6:7-TEXTRAHYDRO-1-METHYL-4-OXO-2:3-BENZAZEPINE" JOURNAL OF THE CHEMICAL SOCIETY, CHEMICAL SOCIETY. LETCHWORTH, GB, 1958, pages 3377-3386, XP001109260 ISSN: 0368-1769 * page 3383 *	8-15	
X	WO 97 22589 A (GLAXO GROUP LTD ;WATSON NIGEL STEPHEN (GB); PASS MARTIN (GB); PATE) 26 June 1997 (1997-06-26) * page 131, line 11,12 * * page 131, line 19,20 *	8-15	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
X	PROCTOR G R ET AL: "AZABENZOCYCLOHEPTENONES. PART II. DIECKMANN CYCLISATION OF ARYLAMINO-ESTERS" JOURNAL OF THE CHEMICAL SOCIETY, CHEMICAL SOCIETY. LETCHWORTH, GB, 1957, pages 2312-2314, XP001109276 ISSN: 0368-1769 * page 2314 *	8-10, 12-14	
X	DATABASE CROSSFIRE BEILSTEIN 'Online! Beilstein Institut zur Förderung der Chemischen Wissenschaften, Frankfurt am Main, DE ; Database accession no. 2875160 XP002226077 * abstract * & JP 05 197054 A (FUDSISAWA JAKUCHIN KOGE) 1978 --- -/--	8,10-12, 14,15	



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	US 3 780 095 A (KLEMM-K ET AL) 18 December 1973 (1973-12-18) * claims 1,11; examples 9,10 * ---	8,10-12, 14,15	<div>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</div>
X	GB 1 417 273 A (HERCULES INC) 10 December 1975 (1975-12-10) * column 5, line 107 - line 109 * ---	8,10-12, 14,15	
X	BERRY D J ET AL: "POLYCHLOROAROMATIC COMPOUNDS. PART V. PREPARATION AND OXIDATION OF PENTACHLOROPHENYL-SUBSTITUTED TERTIARY AMINES AND REACTIONS OF N-BUTYL-LITHIUM AND OTHER NUCLEOPHILES WITH VARIOUS PENTACHLOROPHENYL DERIVATIVES" JOURNAL OF THE CHEMICAL SOCIETY, SECTION C: ORGANIC CHEMISTRY, CHEMICAL SOCIETY. LETCHWORTH, GB, 1969, pages 1285-1294, XP001109259 ISSN: 0022-4952 * abstract * * page 1286 - page 1287 * * page 1292 * ---	8,10-12, 14,15	
X	EP 0 561 175 A (MOCHIDA PHARM CO LTD) 22 September 1993 (1993-09-22) * examples 122,123 * ---	8,10-12, 14,15	
X	EP 0 792 874 A (PFIZER LTD ;PFIZER RES & DEV (IE)) 3 September 1997 (1997-09-03) * example 18 * ---	8,10,12, 14	
X	EP 0 344 724 A (NEORX CORP) 6 December 1989 (1989-12-06) * page 31, line 1 - line 9 * ---	8,10,11	
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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	KOEBEL, R.F. ET AL.: JOURNAL OF MEDICINAL CHEMISTRY, vol. 18, no. 2, 1975, pages 192-194, XP001040683 * page 192 - page 194 * * compound 11 *	8-10	
X	FR 2 098 587 A (ARIES ROBERT) 10 March 1972 (1972-03-10) * claim 1; examples 1-3 *	8,11,12, 15	
X	FR 1 604 832 A (ARIES, ROBERT) 17 April 1972 (1972-04-17) * example 2 *	8,11,12, 15	
X	HOLDSWORTH M G ET AL: "N-PHENYL PYRROLES DERIVED FROM PHENACYL LAEVULINIC ACID" JOURNAL AND PROCEEDINGS OF THE ROYAL SOCIETY OF NEW SOUTH WALES, XX, XX, vol. 70, 1936, pages 431-436, XP008010886 ISSN: 0035-9173 * page 432 * * page 434 - page 436 *	8,11	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
D,A	US 4 952 573 A (LECLERC GERARD ET AL) 28 August 1990 (1990-08-28) * abstract; examples 5,6 *	1-15	



European Patent  
Office

**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
**EP 00 95 6925**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

**1. Claims: 1-20**

Process for the preparation of aminobutyric acids and esters thereof and aminobutyric acid compounds.

**2. Claims: 21-30**

Processes for the preparation of azepines.



Claim(s) searched incompletely:  
1-20

Reason for the limitation of the search:

Present claims 1-20 relate to an extremely large number of possible compounds and processes for their preparation. Support within the meaning of Article 84 EPC and/or disclosure within the meaning of Article 83 EPC is to be found, however, for only a very small proportion of the compounds and processes claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds prepared and described in the independent claims 5, 12 and 20 with the following restrictions: R2=R3=R4=R5=hydrogen, Y=substituents exemplified in the description on page 14, line 8 - page 15, line 1.

# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 00 95 6925

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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23-12-2002

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82



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ON EUROPEAN PATENT APPLICATION NO.

EP 00 95 6925

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